

FIG. 1

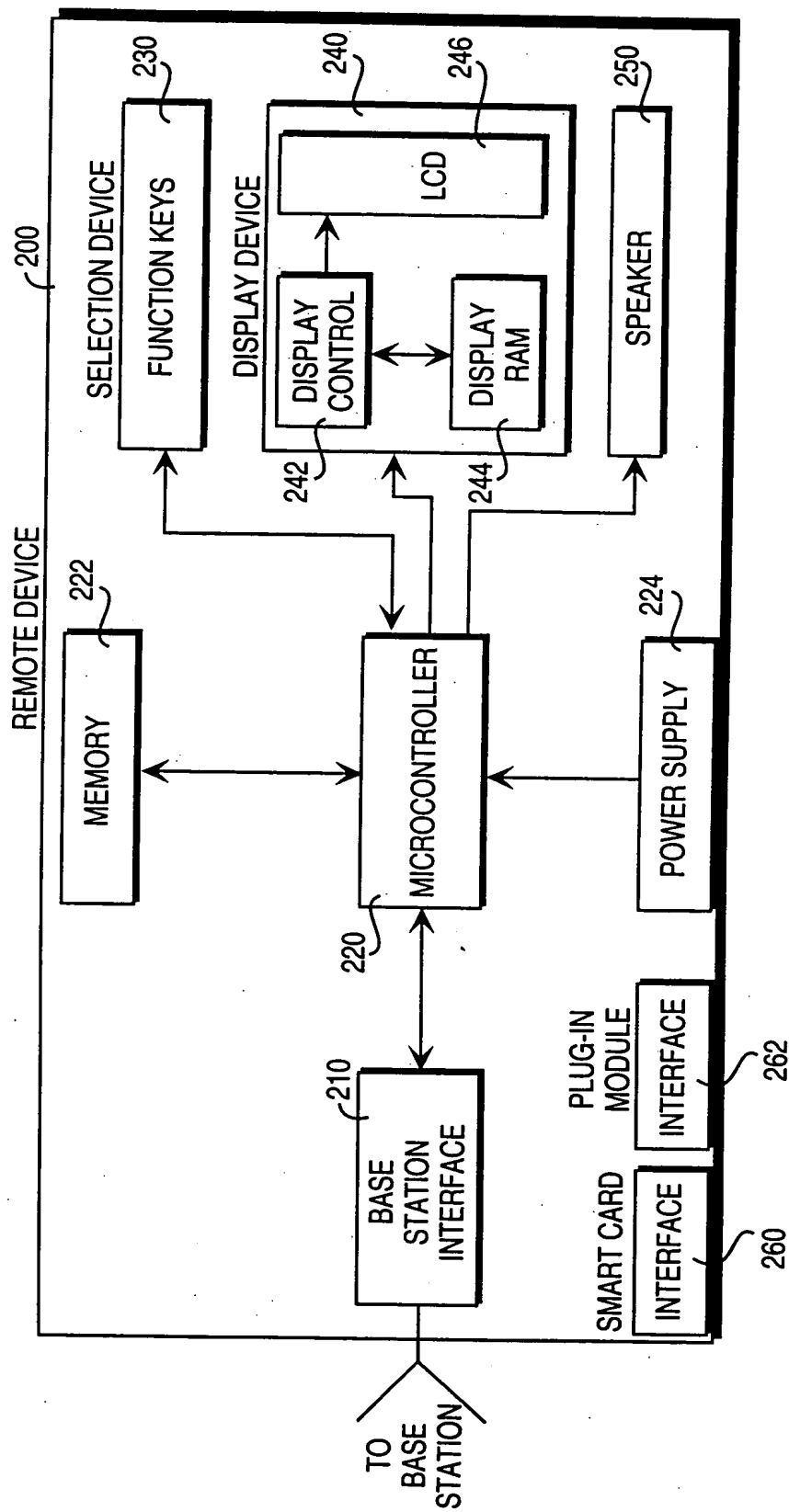


FIG. 2

FIG. 3A

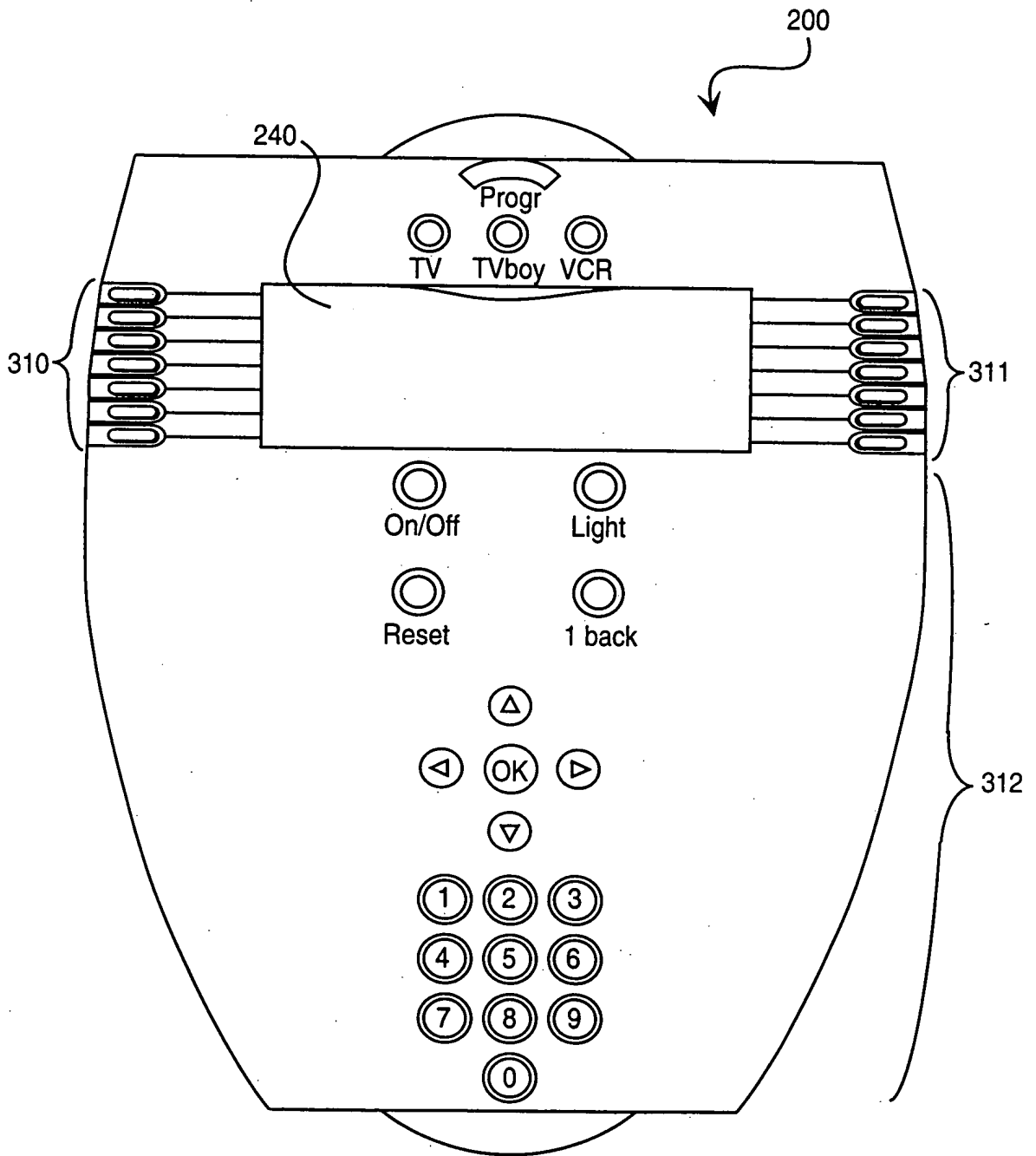


FIG. 3B

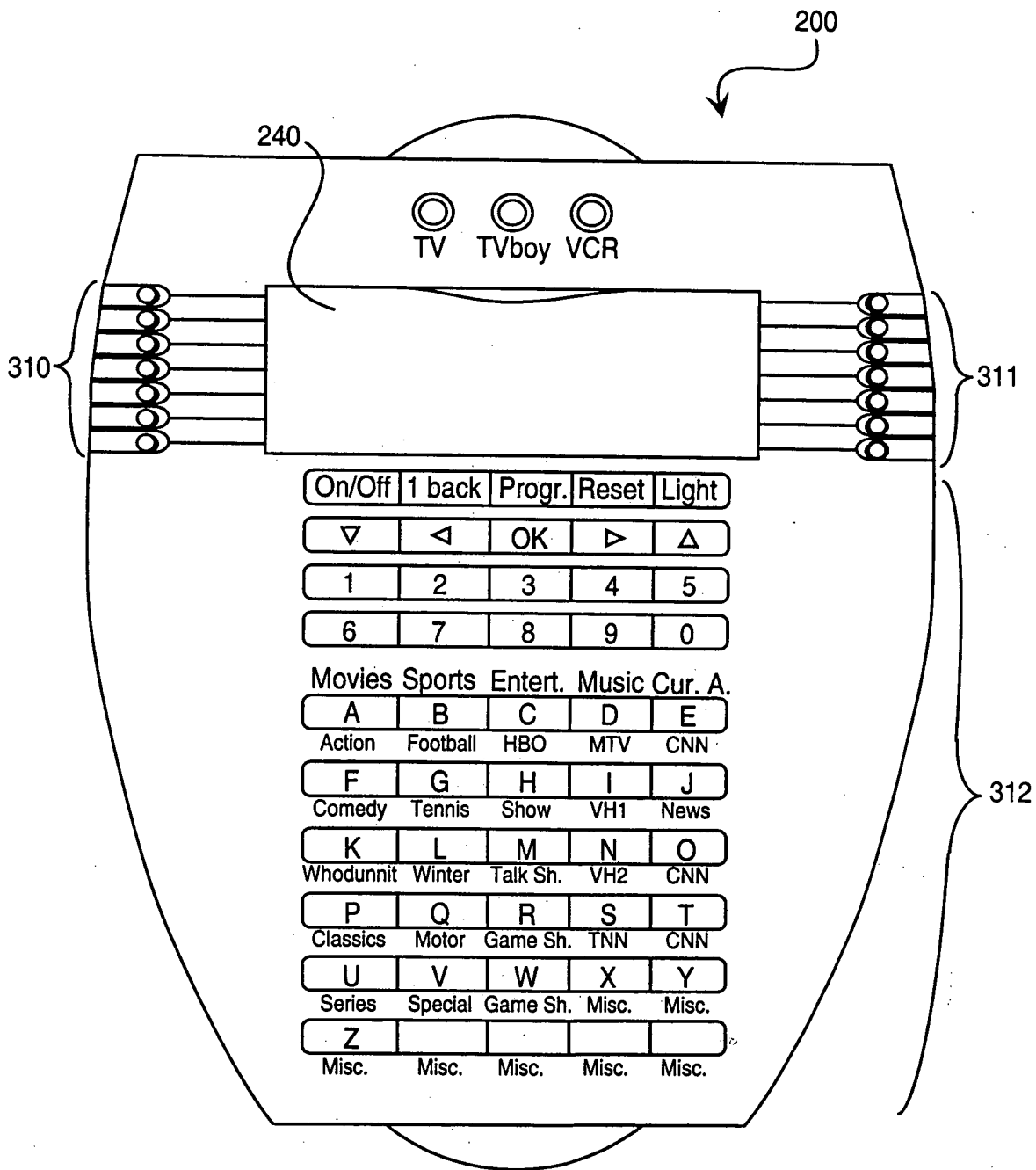


FIG. 3C

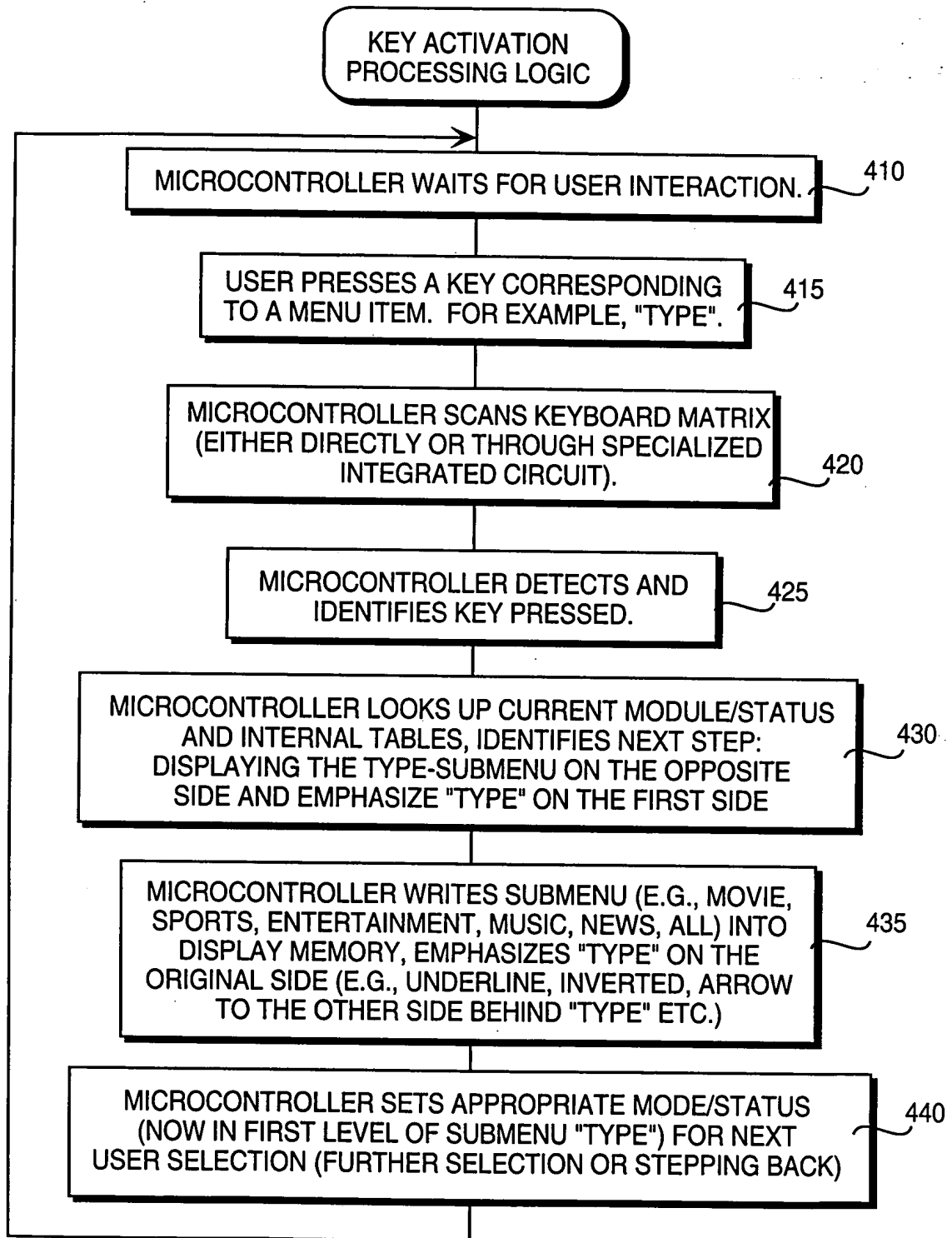


FIG. 4

EXTERNAL INFORMATION
PROCESSING LOGIC

MICROCONTROLLER INITIALIZES DECODER FOR
CONTINUOUS RECEPTION OF SPECIFIC DATA
PAGES/SUBPAGES. TUNER IS TUNED TO A
DEDICATED TV CHANNEL.

510

MICROCONTROLLER WAITS FOR DATA.

515

DECODER SIGNALS RECEPTION OF DATA.

520

MICROCONTROLLER READS OUT DATA,
STARTS DECODER AGAIN (IF NECESSARY).

525

MICROCONTROLLER CHECKS WHETHER RECEIVED DATA
IS ERROR-FREE (OUTER ERROR CHECK) E.G., BY CHECKING
PARITY BITS, HAMMING BITS, CYCLIC REDUNDANCY CHECK
AND/OR OTHER COMMONLY USED METHODS.

530

MICROCONTROLLER DECRYPTS THE DATA AND
CHECKS THE TYPE OF DATA.

535

MICROCONTROLLER PROCESSES DATA APPROPRIATELY,
ALLOWS ONLY PROCESSING OF MESSAGES, DATA,
UPDATES WHICH ARE CURRENTLY ENABLED (LOOKS UP
ENABLED MODES IN INTERNAL SECURE MEMORY).

540

FIG. 5

DocId: 32362760

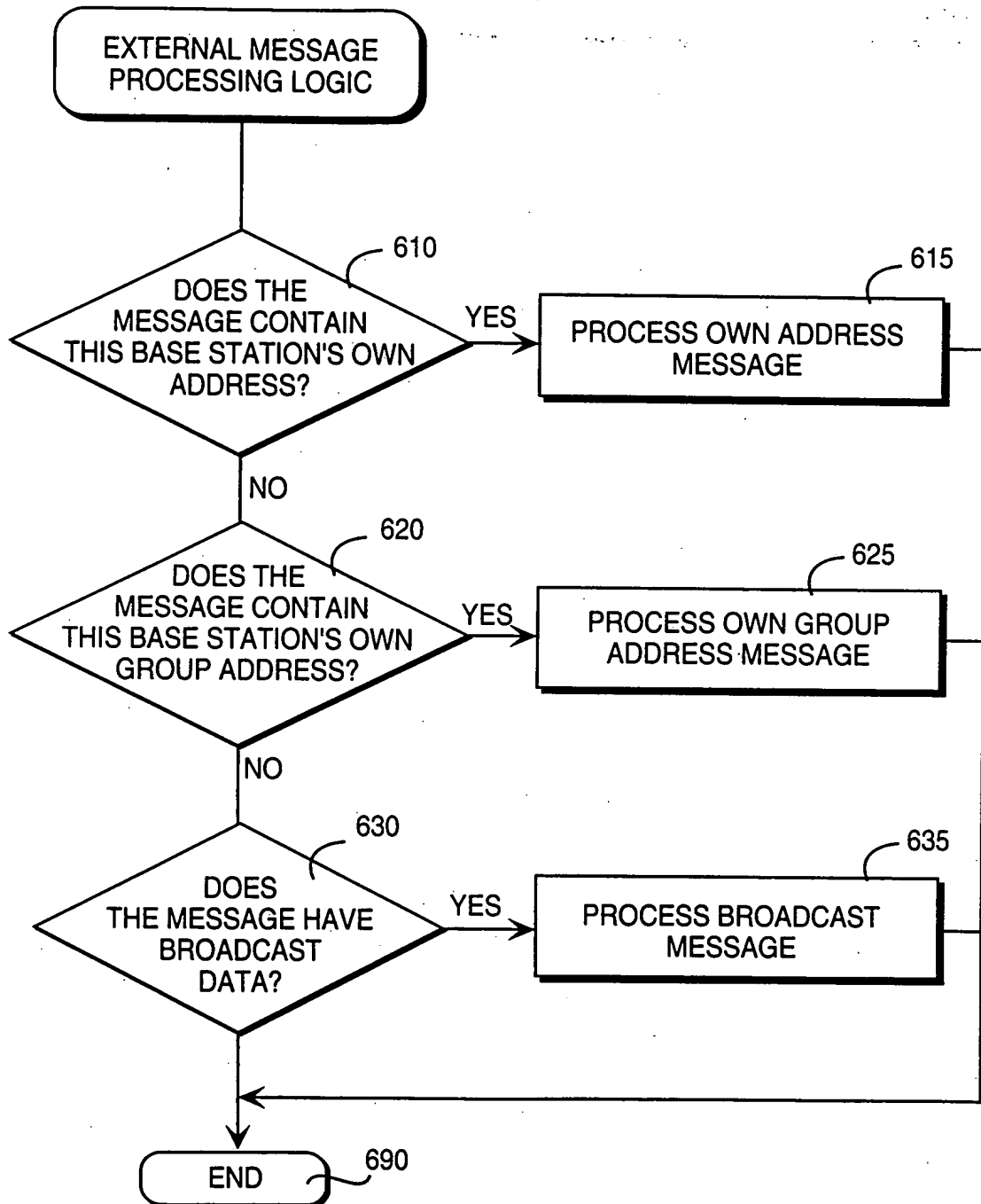


FIG. 6

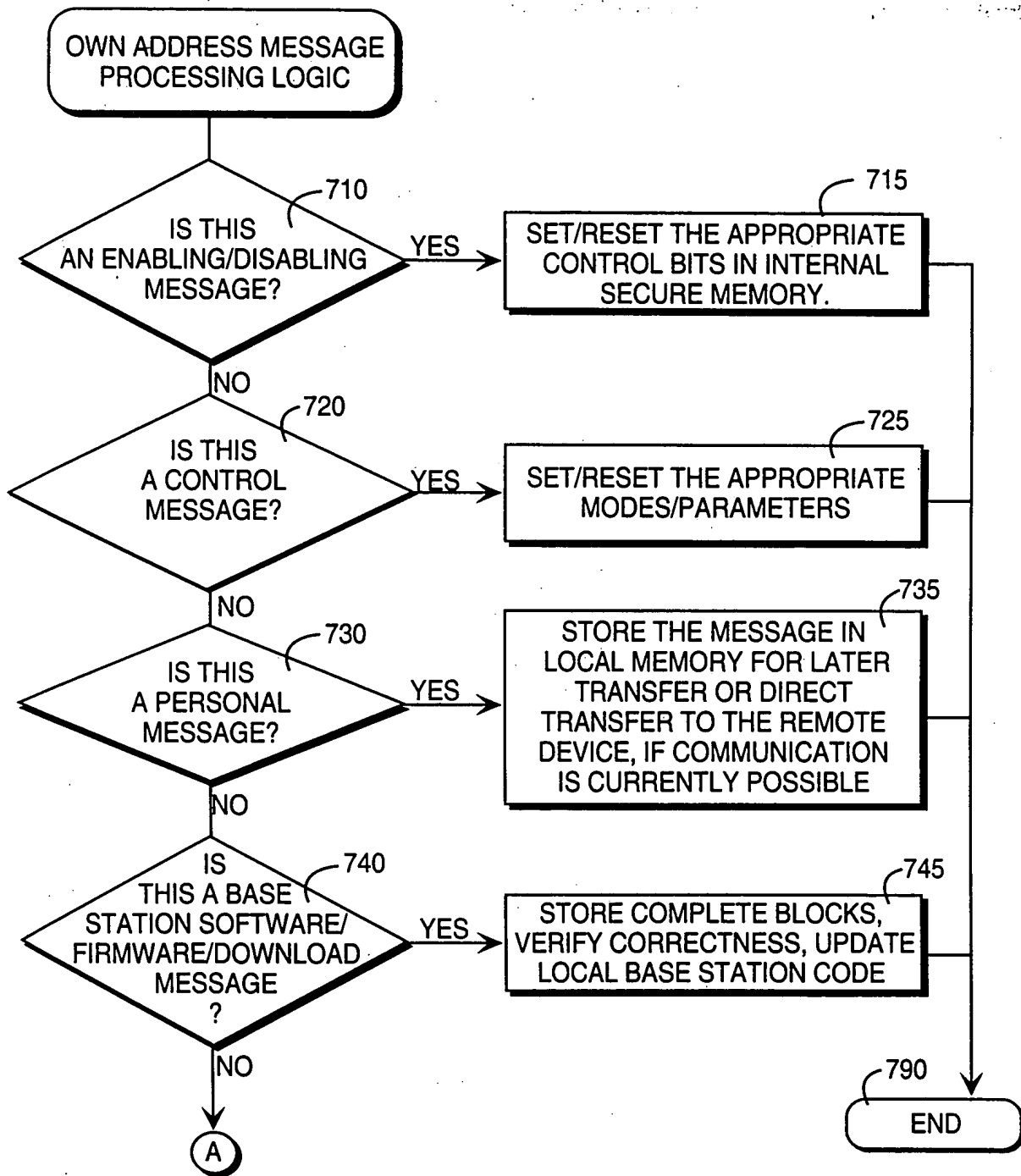


FIG. 7

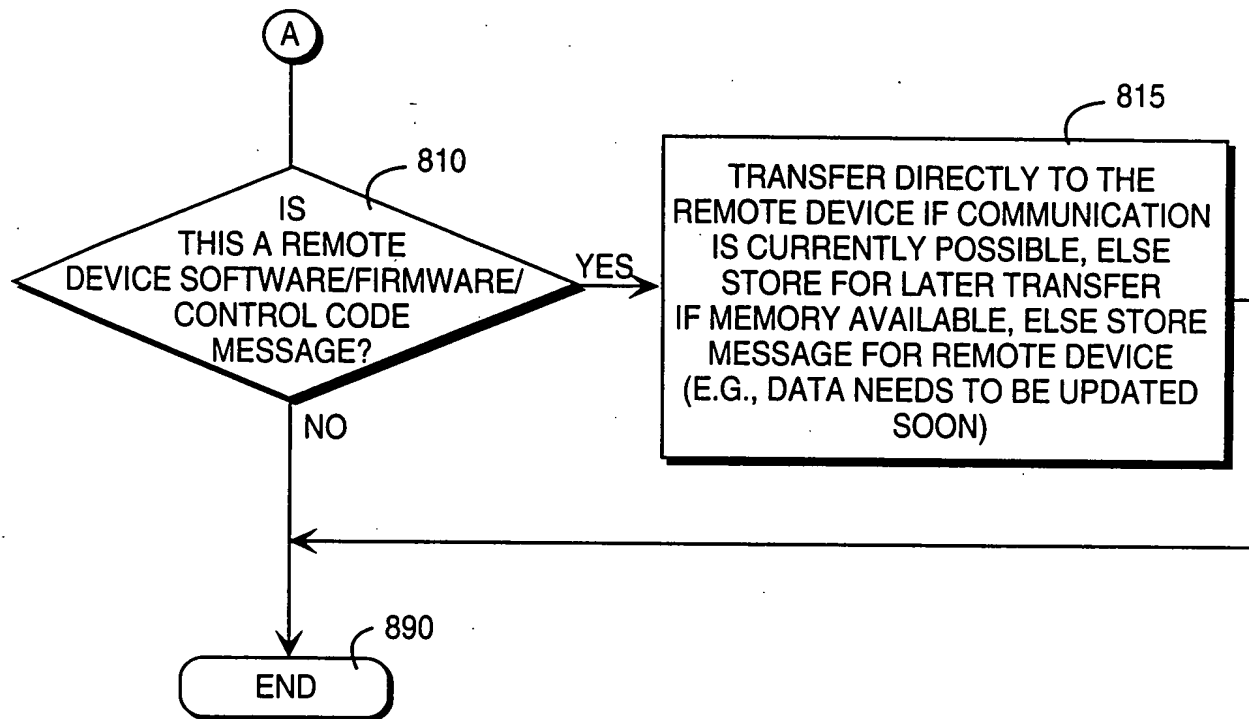


FIG. 8

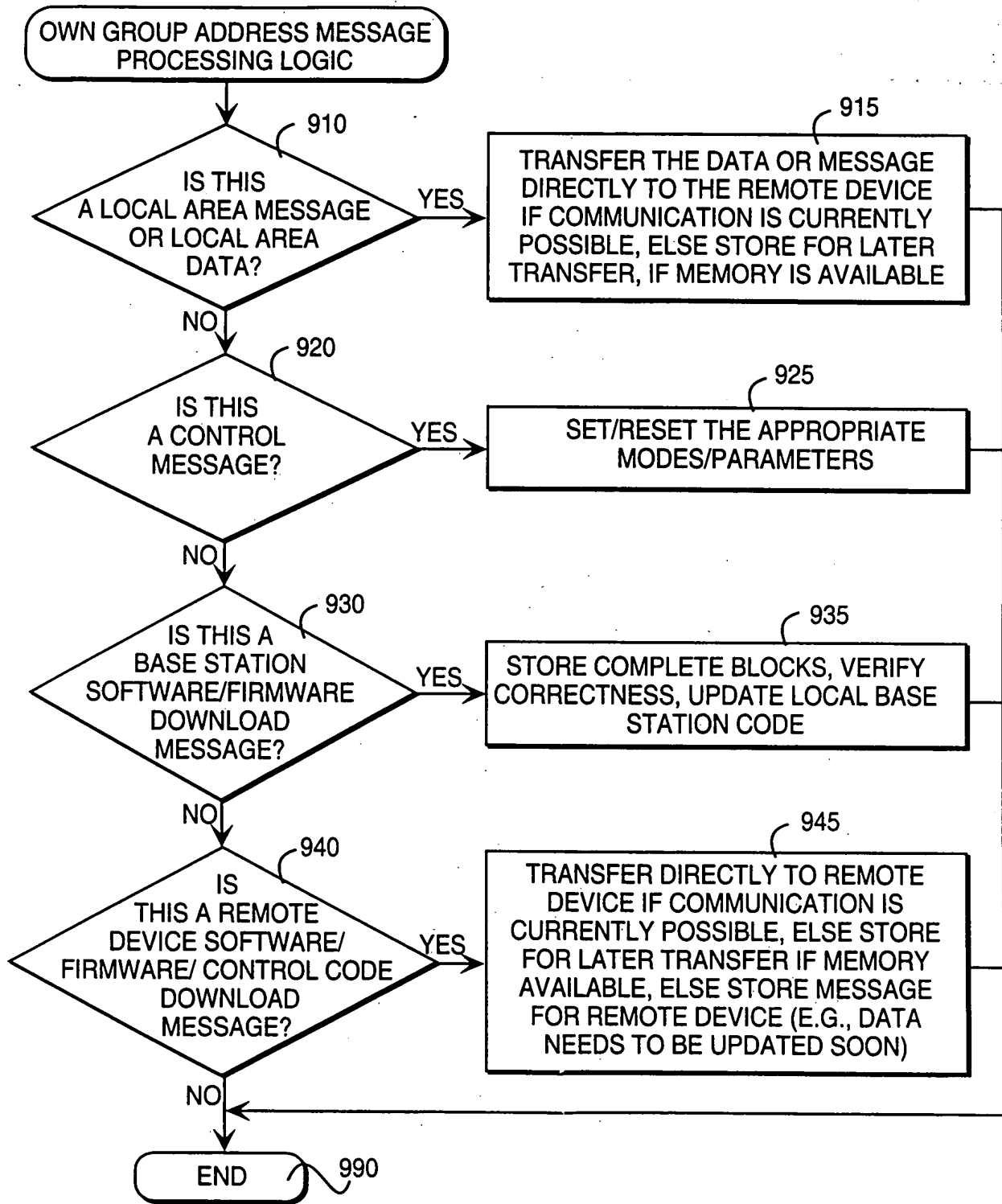


FIG. 9

```

graph TD
    Start([BROADCAST MESSAGE  
PROCESSING LOGIC]) --> 1010{IS THIS  
A GENERAL MESSAGE OR  
GENERAL DATA?}
    1010 -- YES --> 1015[TRANSFER THE DATA OR MESSAGE  
DIRECTLY TO THE REMOTE DEVICE  
IF COMMUNICATION IS CURRENTLY  
POSSIBLE, ELSE STORE FOR LATER  
TRANSFER, IF MEMORY IS AVAILABLE]
    1010 -- NO --> 1020{IS THIS  
A CONTROL  
MESSAGE?}
    1020 -- YES --> 1025[SET/RESET THE APPROPRIATE  
MODES/PARAMETERS]
    1020 -- NO --> 1030{IS THIS A  
BASE STATION  
SOFTWARE/FIRMWARE  
DOWNLOAD  
MESSAGE?}
    1030 -- YES --> 1035[STORE COMPLETE BLOCKS, VERIFY  
CORRECTNESS, UPDATE LOCAL BASE  
STATION CODE]
    1030 -- NO --> 1040{IS  
THIS A REMOTE  
DEVICE SOFTWARE/  
FIRMWARE/ CONTROL CODE  
DOWNLOAD  
MESSAGE?}
    1040 -- YES --> 1045[TRANSFER DIRECTLY TO REMOTE  
DEVICE IF COMMUNICATION IS  
CURRENTLY POSSIBLE, ELSE STORE  
FOR LATER TRANSFER IF MEMORY  
AVAILABLE, ELSE STORE MESSAGE  
FOR REMOTE DEVICE (E.G., DATA  
NEEDS TO BE UPDATED SOON)]
    1040 -- NO --> 1090([END])
    1015 --> 1090
    1025 --> 1090
    1035 --> 1090
    1045 --> 1090

```

FIG. 10

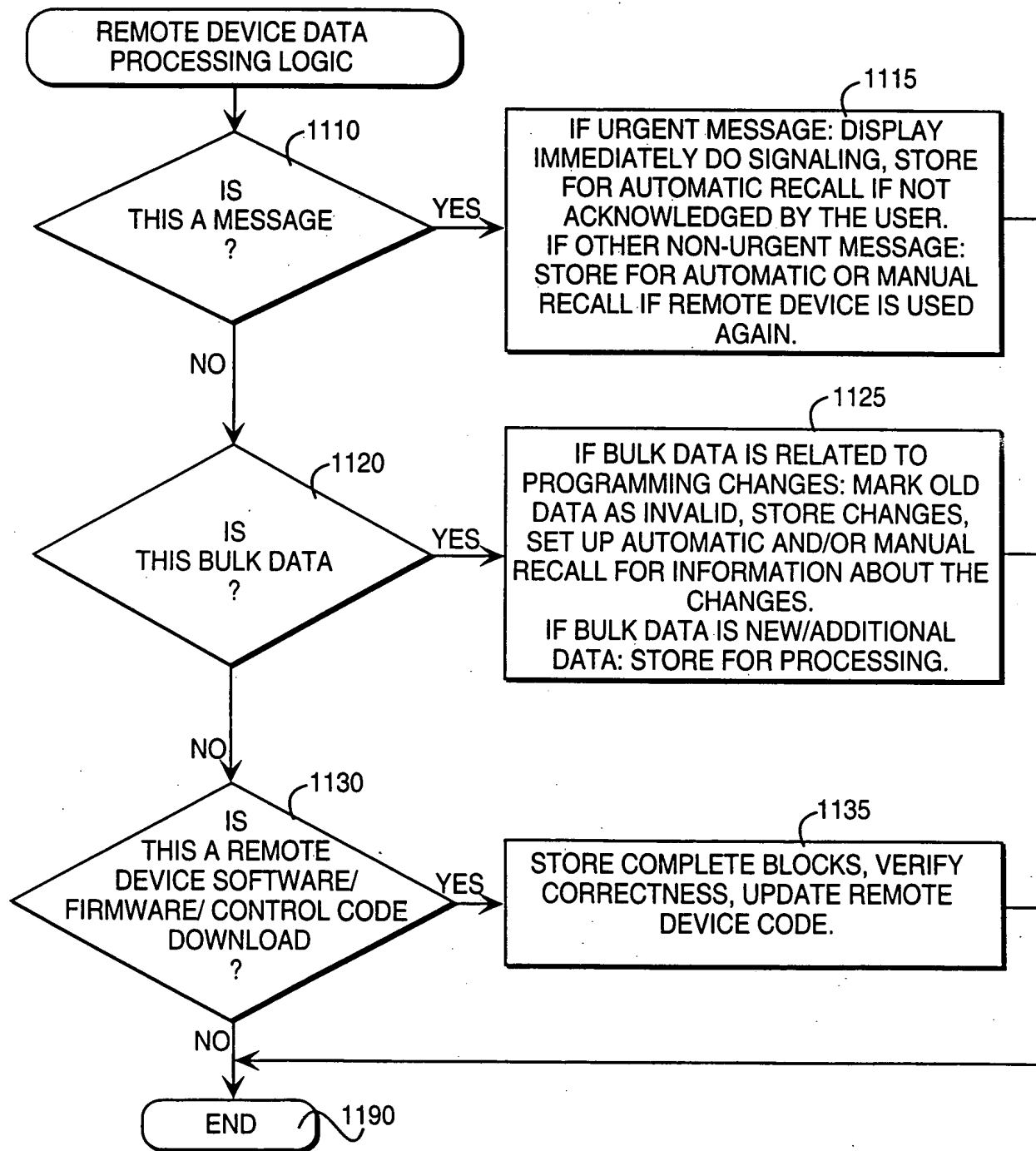


FIG. 11

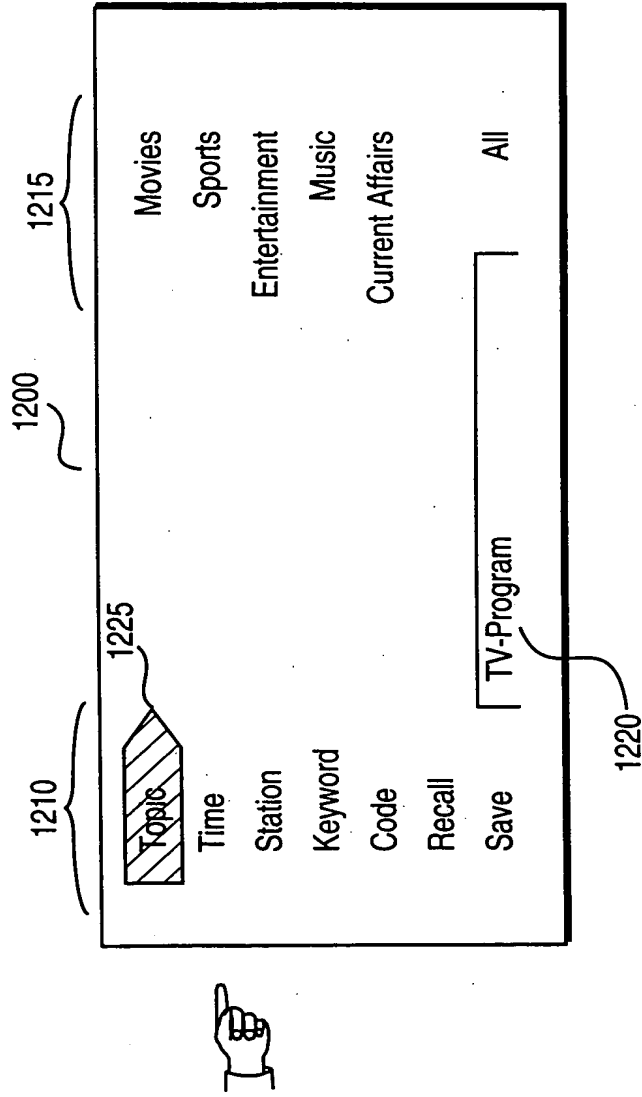


FIG. 12

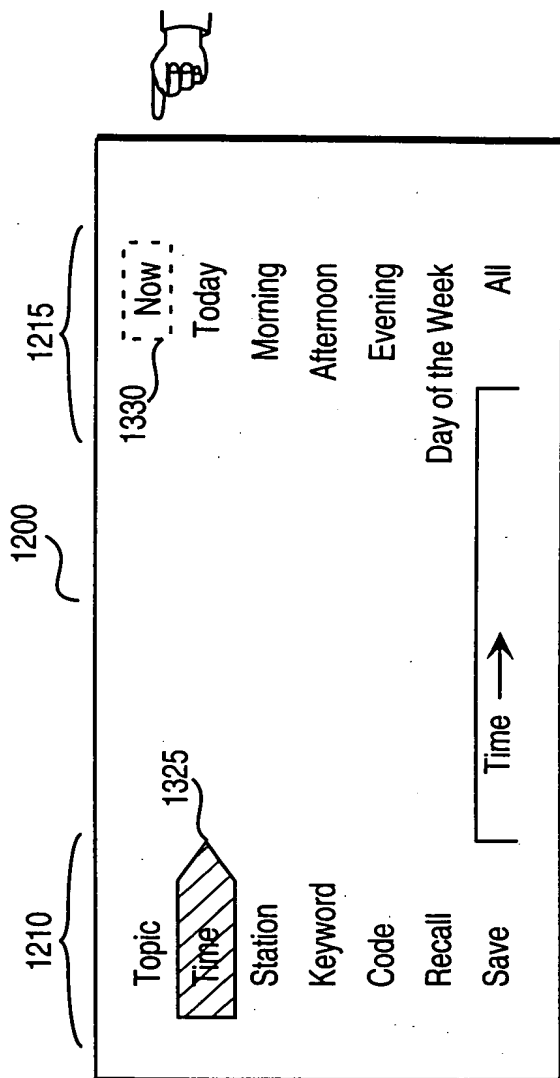


FIG. 13

1500

20.00	ABC	SEINFELD
20	Disney's classic tale of the forest creatures dealing with the wonders and dangers of growing up in the forest.	
20		
22		
22		
23		
MA		

1510

FIG. 15

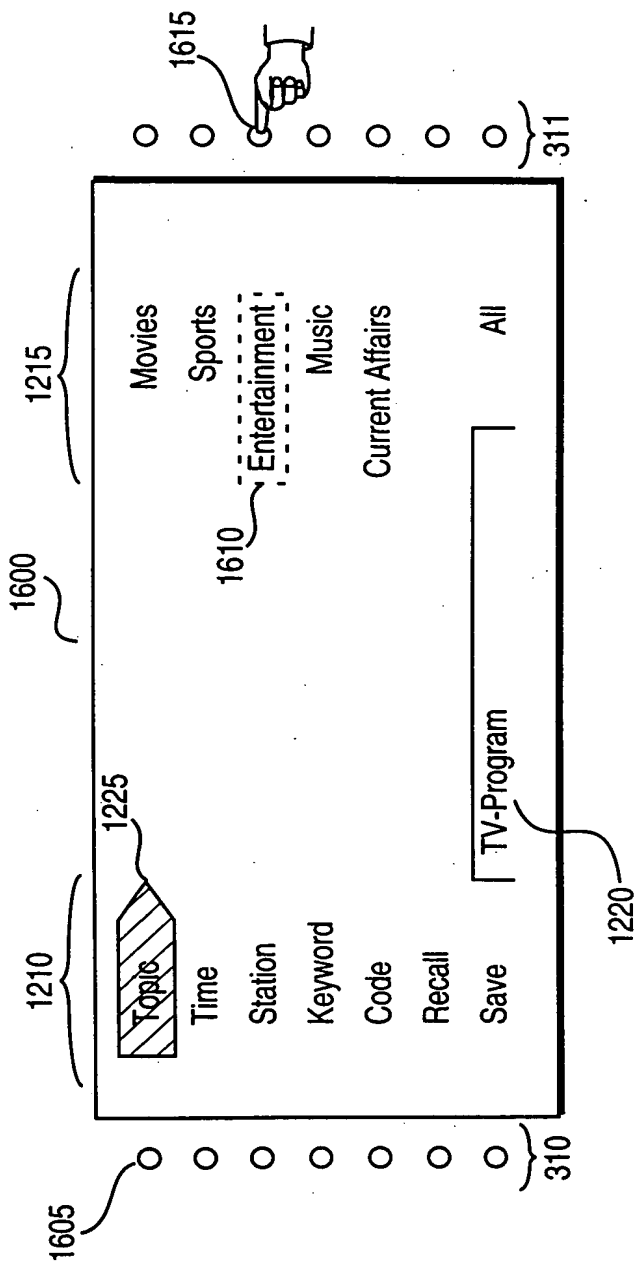


FIG. 16

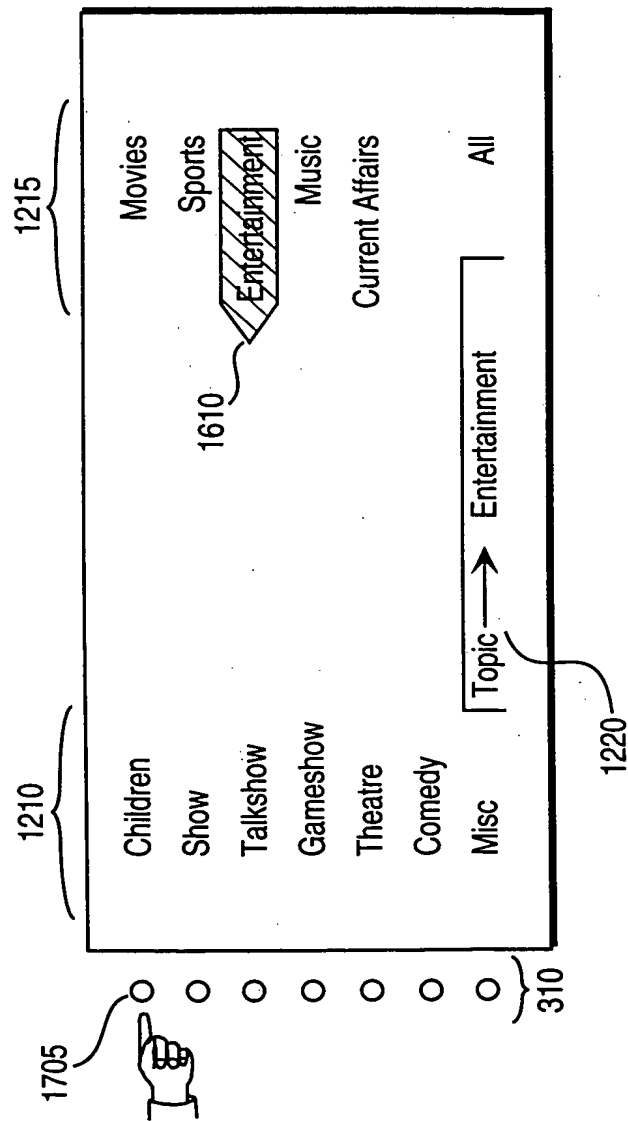


FIG. 17

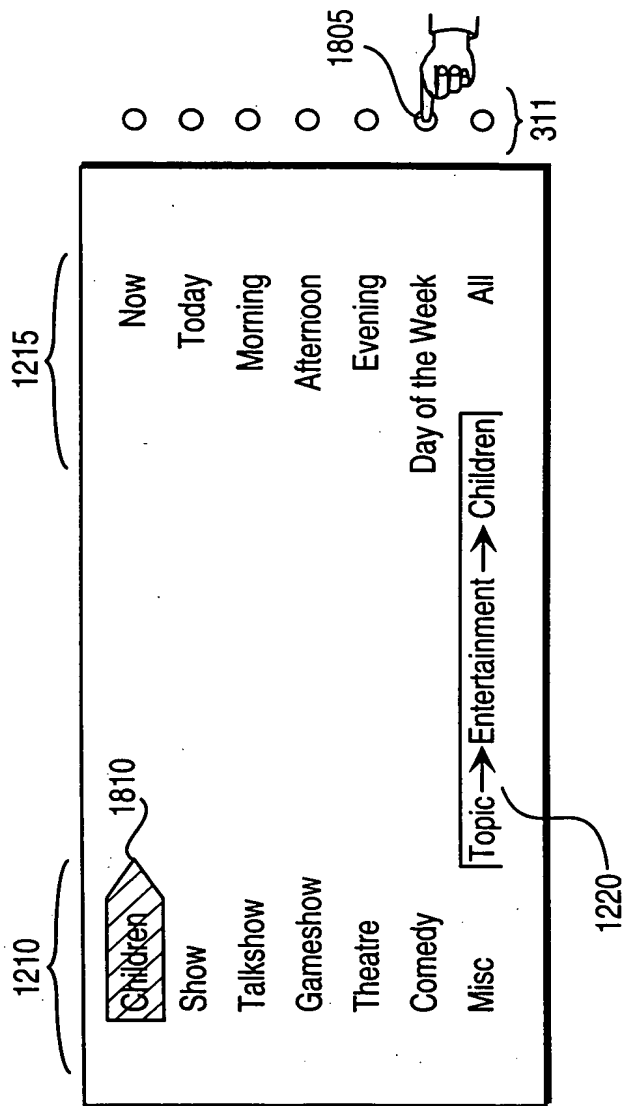


FIG. 18

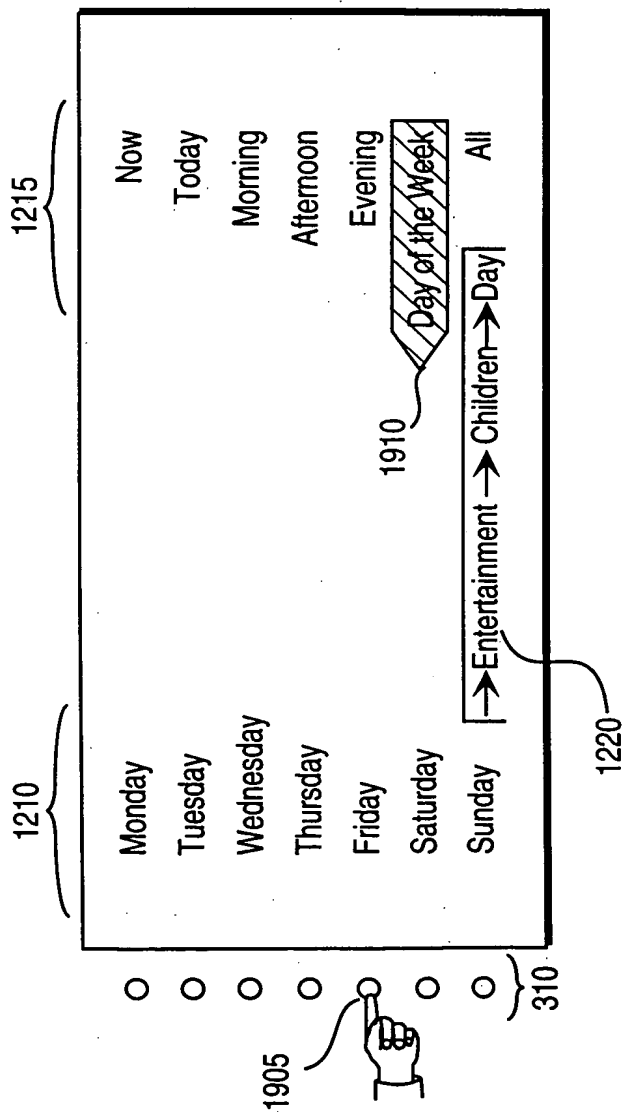


FIG. 19

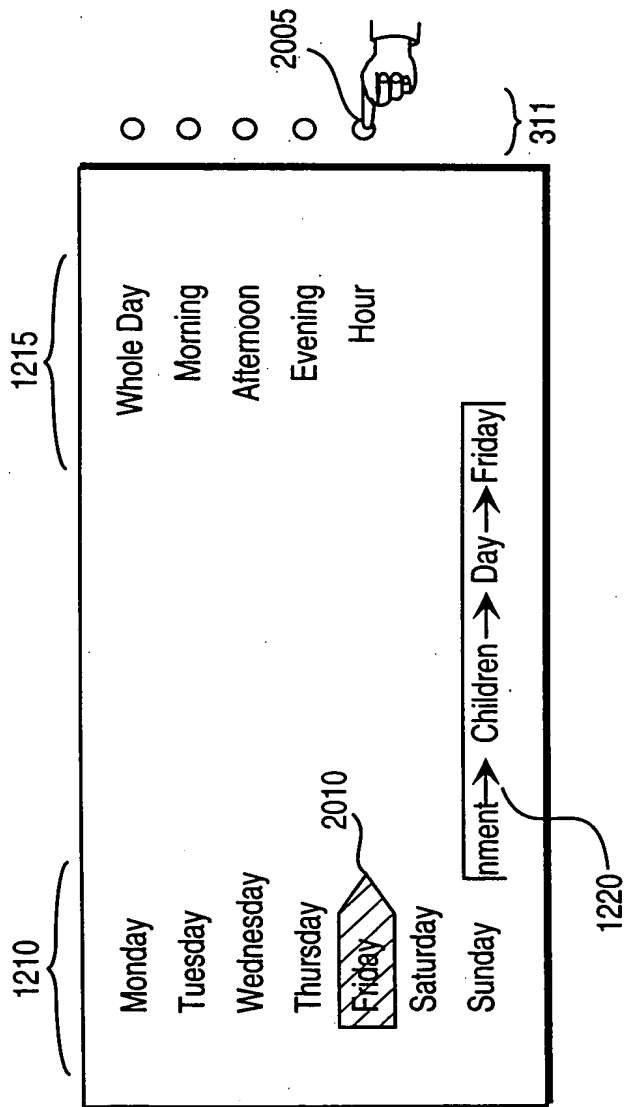


FIG. 20

1720	ABC	SEINFELD
1720	CH4	ER
1720	AMC	GONE WITH THE WIND
1720	CNN	HEADLINE NEWS
1720	DIS	BAMBI
1720	MTV	SOUNDGARDEN LIVE
MARK	Children→Day→Friday→	1720H INFO

1220

FIG. 22

20.00	ABC	SEINFELD
20.35	CH4	ER
20.55	AMC	GONE WITH THE WIND
22.05	CNN	HEADLINE NEWS
22.45	DIS	BAMBI
23.30	MTV	SOUNDGARDEN LIVE
MARK	→ Misc.	→ Evening
		INFO

2305

FIG. 23

20.00	ABC	SEINFELD	<div> <p>THE RECORDING OF BAMBI TAKES 70 MINUTES. INSERT A TAPE INTO YOUR VCR AND PRESS THE PROGR. BUTTON AGAIN, PLEASE.</p> </div>
20.35	CH4	ED	
20.55	AMC		
22.05	CNN		
22.45	DIS		
23.30	MTV	SCORPION BITE	
MARK	→ Misc.	→ Evening	INFO

FIG. 24

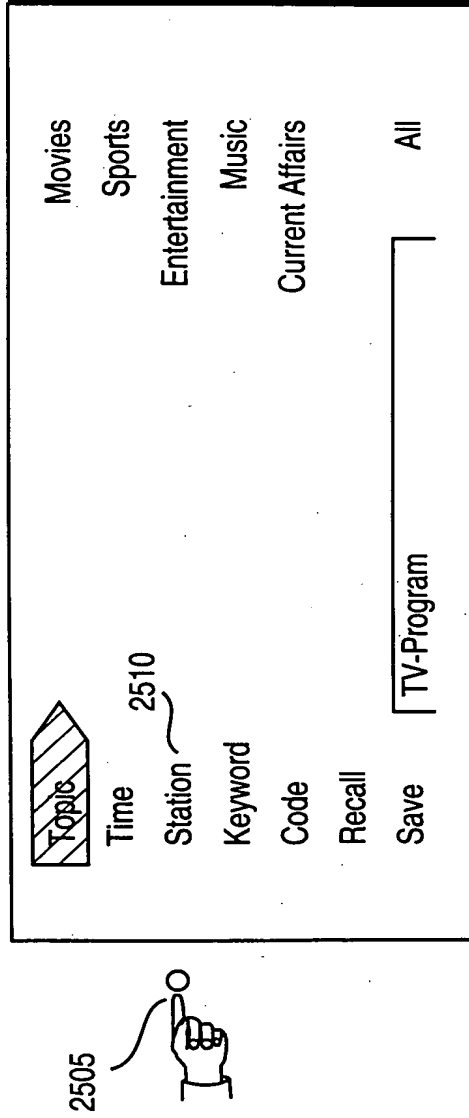


FIG. 25

2615

2610

ARD

ZDF

RTL

SAT 1

PRO 7

RTL 2

ARTE

VOX

DSF

ORF 1

ORF 2

TSR

B 3

TSI

DRS

S 3

S PLUS

TF 1

FR 2

FR 3

EUR

MTV

3SAT

TELECLUB

N 3

W 3

RAI 1

RAI 2

TV 5

TVE

SUP

M 6

Topic

Time

Station

Keyword

Code

Recall

Save

Station →



FIG. 26

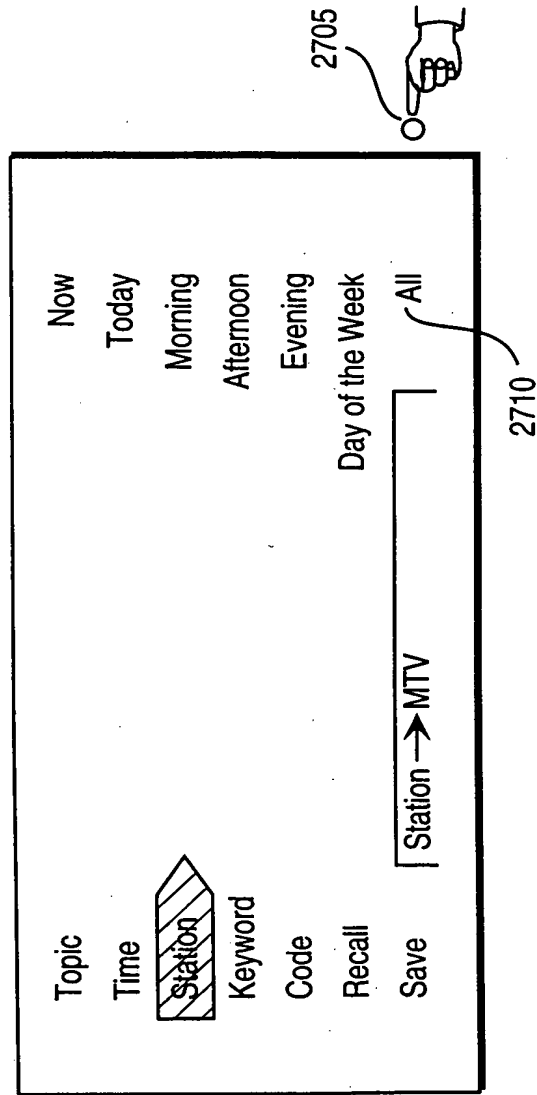


FIG. 27

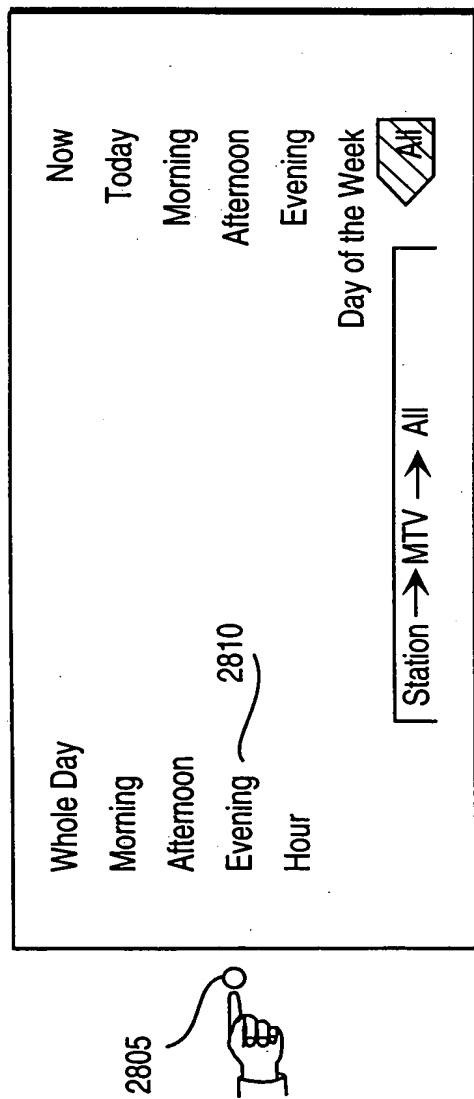


FIG. 28

19.30	MTV	TOP 10 HITS
20.00	MTV	INTERVIEW WITH EDDIE VAN HALEN
20.30	MTV	LATEST VIDEOS
22.55	MTV	PREVIEWS
21.00	MTV	U2 IN CONCERT
23.00	MTV	ROCK NEWS
MARK	Station → MTV → All → Evening	INFO

FIG. 29

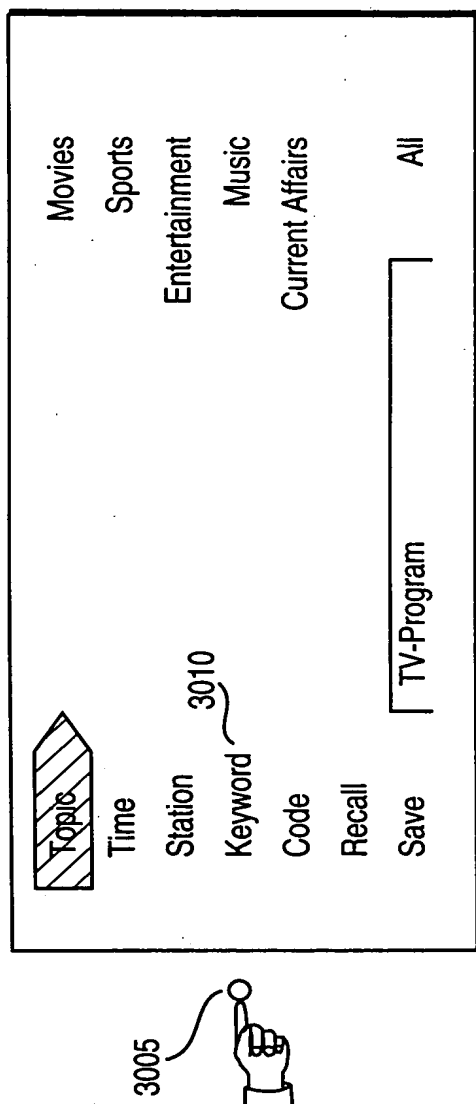


FIG. 30

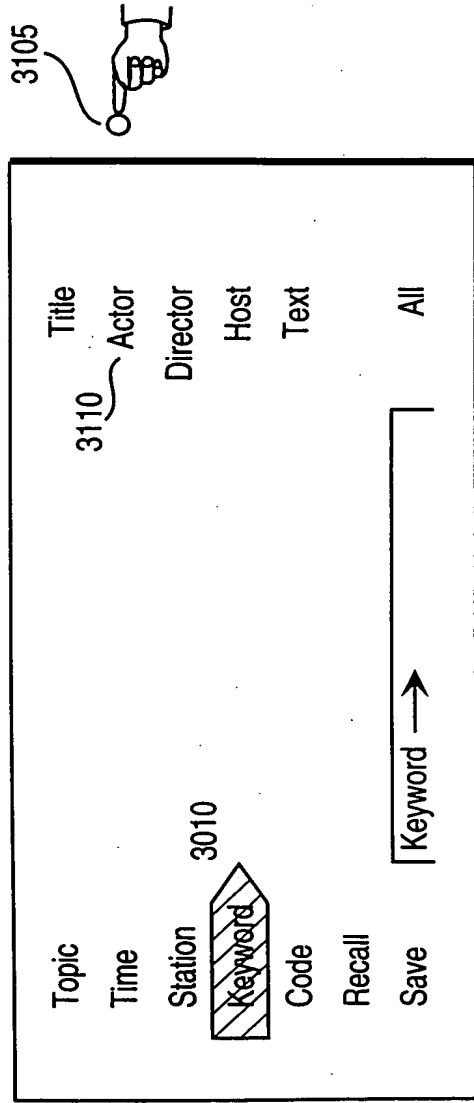


FIG. 31

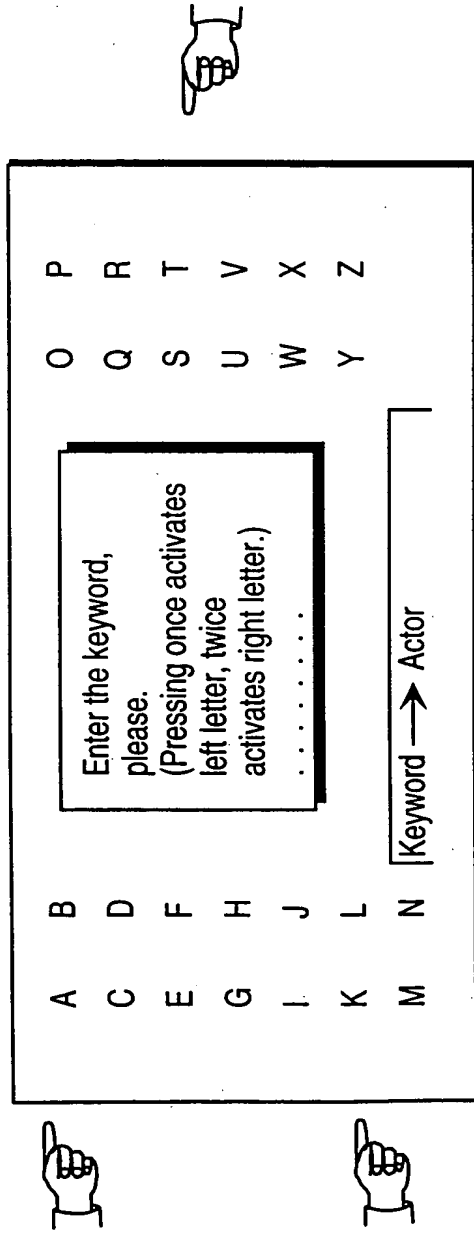


FIG. 32

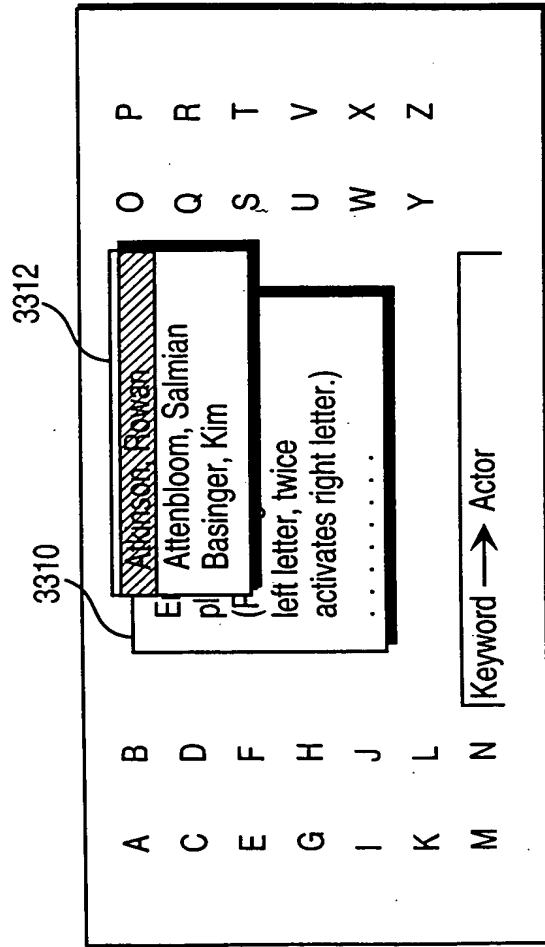


FIG. 33

20.00	ABC	SEINFELD
20.35	CH4	ER
20.55	AMC	GONE WITH THE WIND
22.05	CNN	HEADLINE NEWS
22.45	DIS	BAMBI
23.30	MTV	SOUNDGARDEN LIVE
MARK	Keyword → Actor → Atkinson, Rowan INFO	

1220

FIG. 34

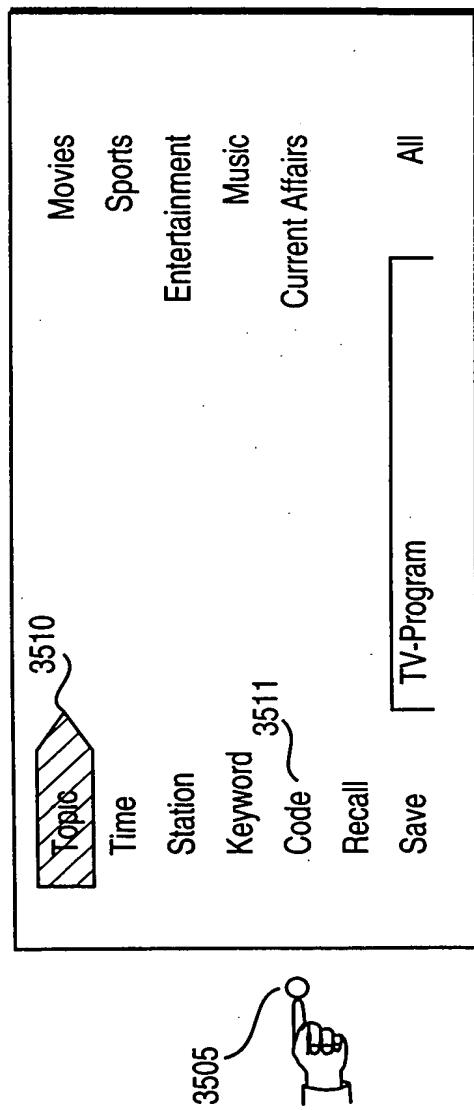


FIG. 35

Topic

Time

Station

Keyword

Code

Recall

Save

Enter code please.
Channel 00-99,
Day 1 (Mon)-7(Sun),
Hours 00-23, 00-59
.....

Code →

FIG. 36

602FF"8E8E460

22.10 NBC NEWS		
MARK	Code → 07.5.22.10	INFO

FIG. 37

Topic

Time

Station

Keyword

Code

Recall

Save

3810

TV-Program

All

Movies

Sports

Entertainment

Music

Current Affairs

3805



FIG. 38

Topic	Movies
Time	Sports
Station	Entertainment
Keyword	Music
Code	Current Affairs
Recall	All

Enter course of selection, please

Save →

3910

3905




FIG. 39

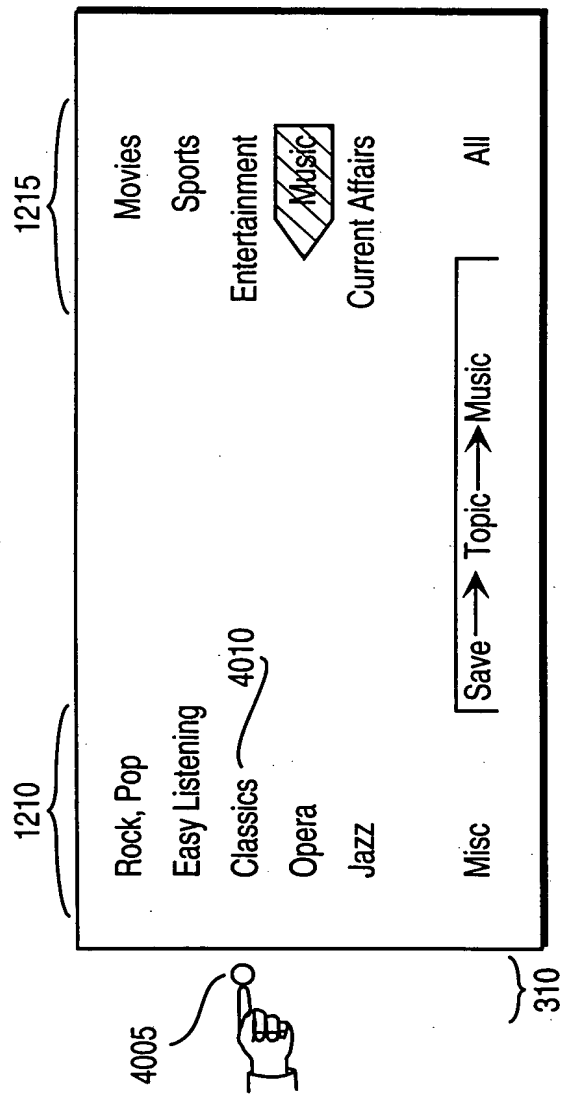


FIG. 40

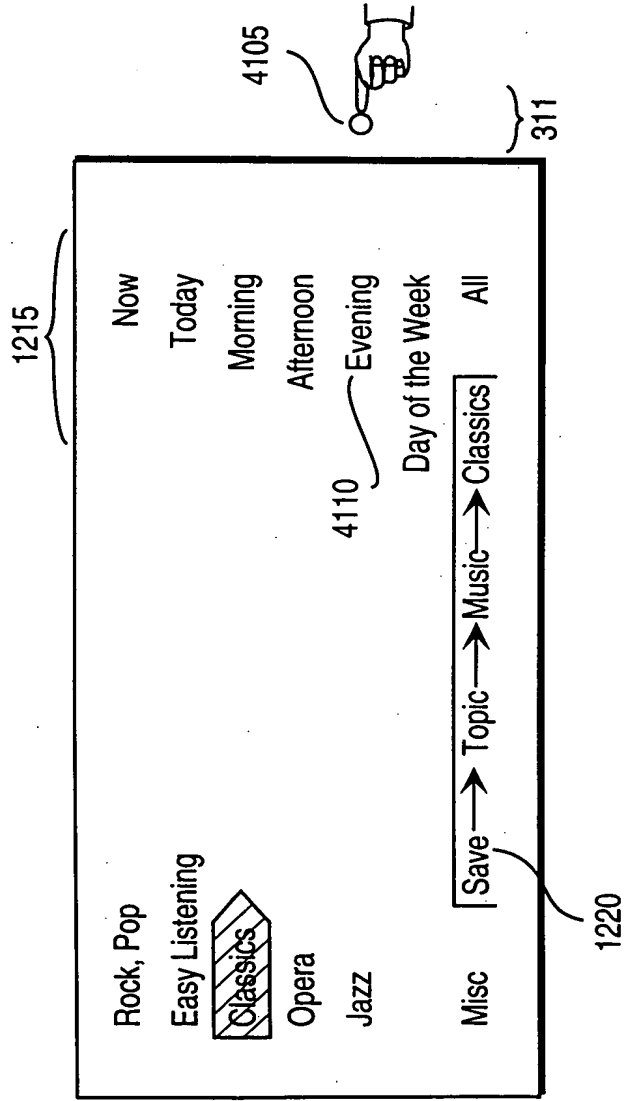


FIG. 41

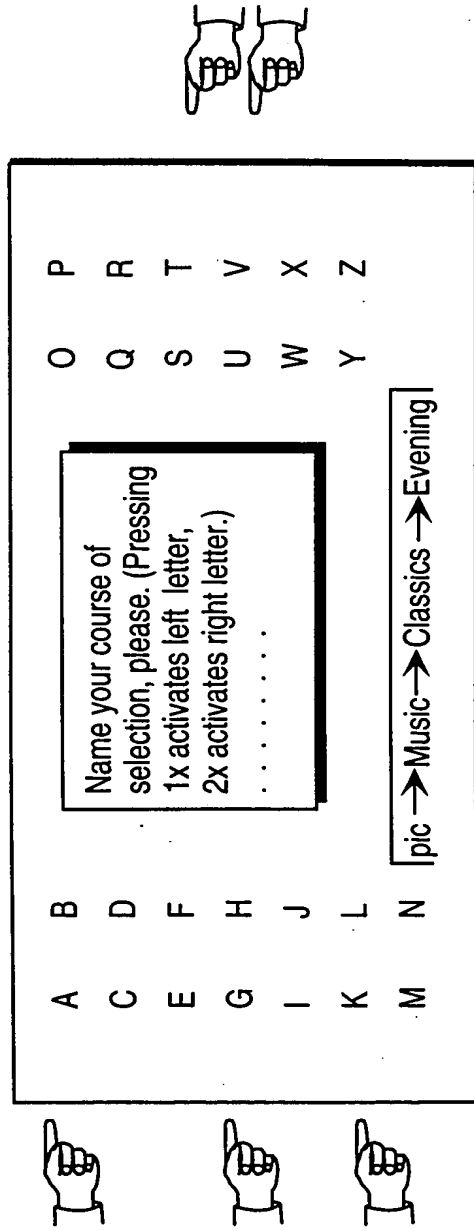


FIG. 42

20.00	ABC	LIVE AT THE MET
20.35	CH4	BOSTON POPS
20.55	AMC	AMADEUS
22.05	NBC	CLASSICAL HOUR
22.45	CH11	NY PHILHARMONIC
23.30	CH25	BEETHOVEN SYMPHONIES
MARK	pic→	Music→ Classics→ Evening INFO

FIG. 43

Topic

Time

Station

Keyword

Code

Recall

Save

Movies

Sports

Entertainment

Music

Current Affairs

All

TV-Program

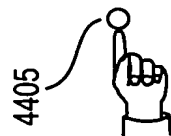


FIG. 44

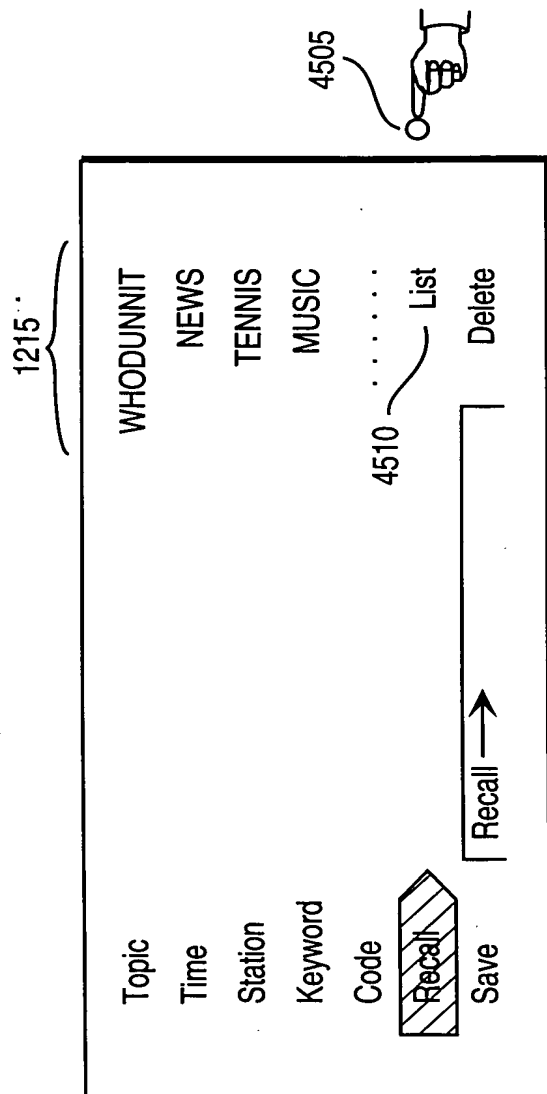


FIG. 45

May 15, 1998		
20.35	CH4	ER
May 16, 1998		
22.05	CNN	HEADLINE NEWS
May 17, 1998		
23.30	MTV	SOUNDGARDEN LIVE
MARK	Recall →	List
		INFO

FIG. 46

Topic	Movies
Time	Sports
Station	Entertainment
Keyword	Music
Code	Current Affairs
Recall	
Save	All

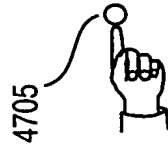


FIG. 47

1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100

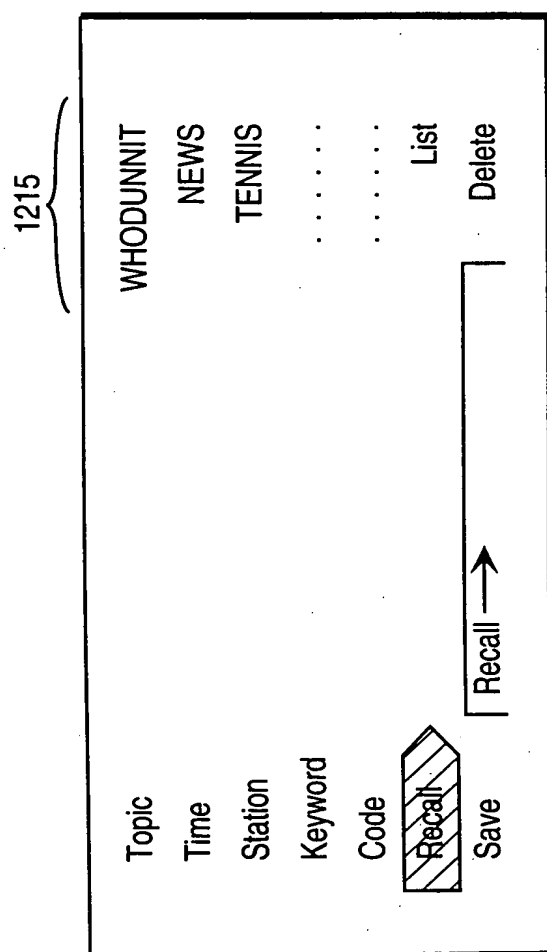


FIG. 48

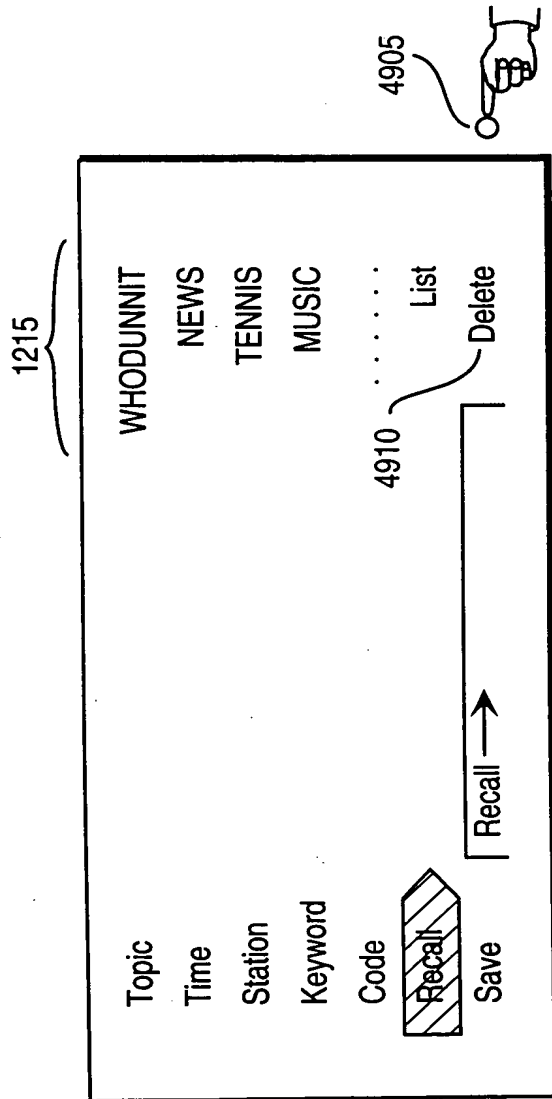


FIG. 49

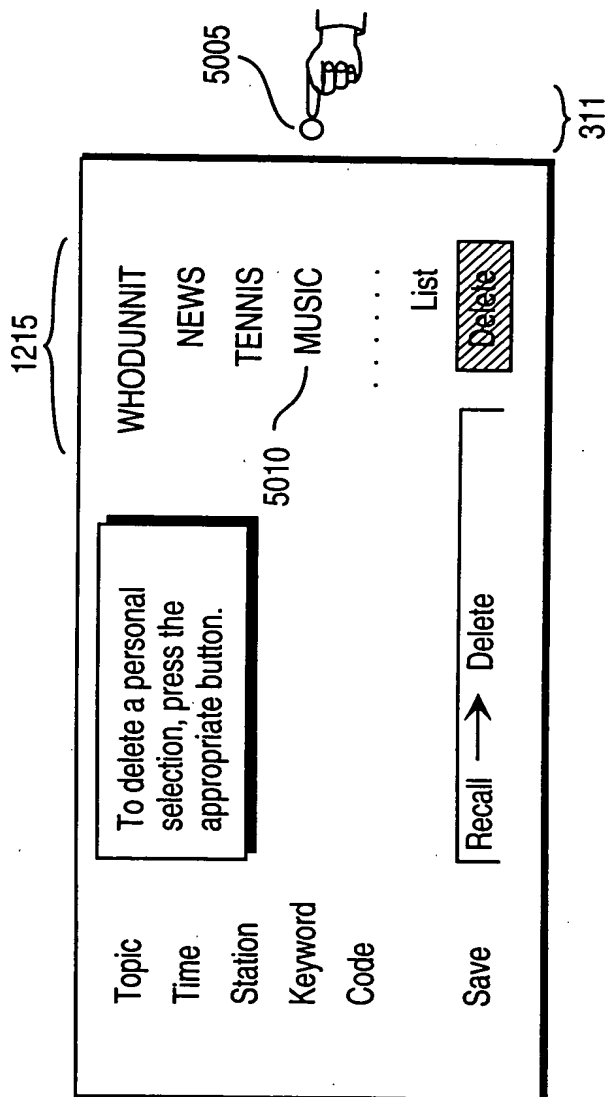


FIG. 50

Topic	WHODUNNIT
Time	NEWS
Station	TENNIS
Keyword	MUSIC
Code
Save	List
	<input type="button" value="Recall"/> → <input type="button" value="Delete"/>
	<input type="button" value="Delete"/>

To delete a personal selection, press the app

To confirm that you want to delete your personal selection MUSIC press ok, please.

FIG. 51

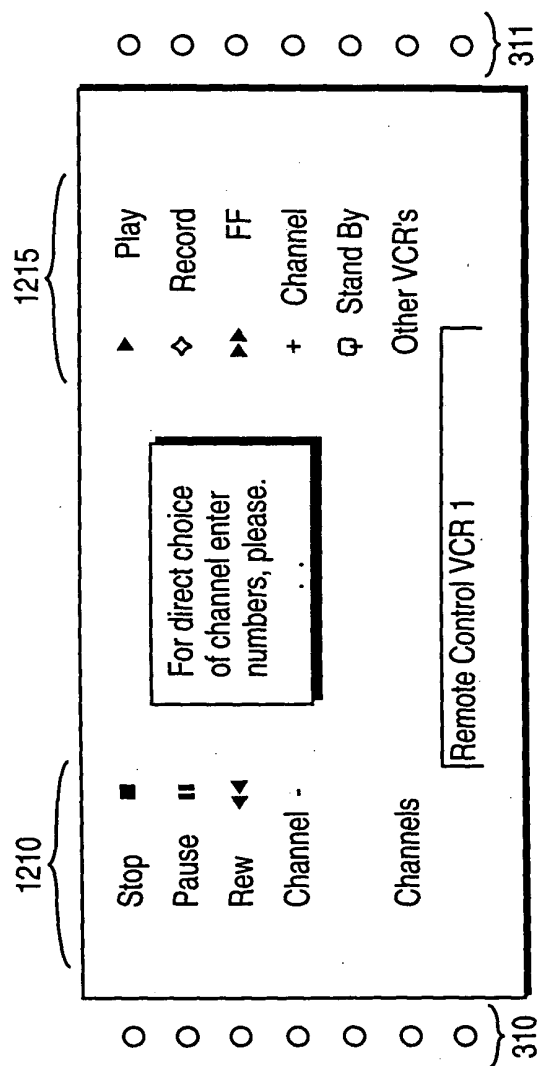
[illegible]

FIG. 52

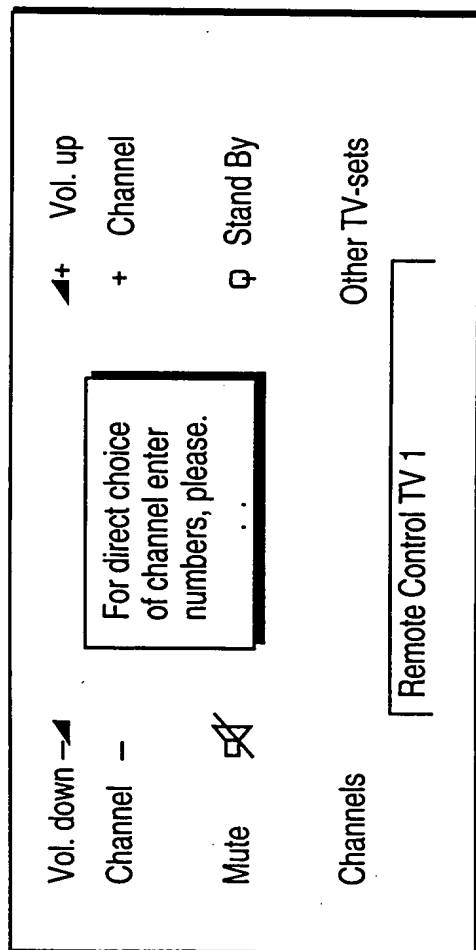


FIG. 53

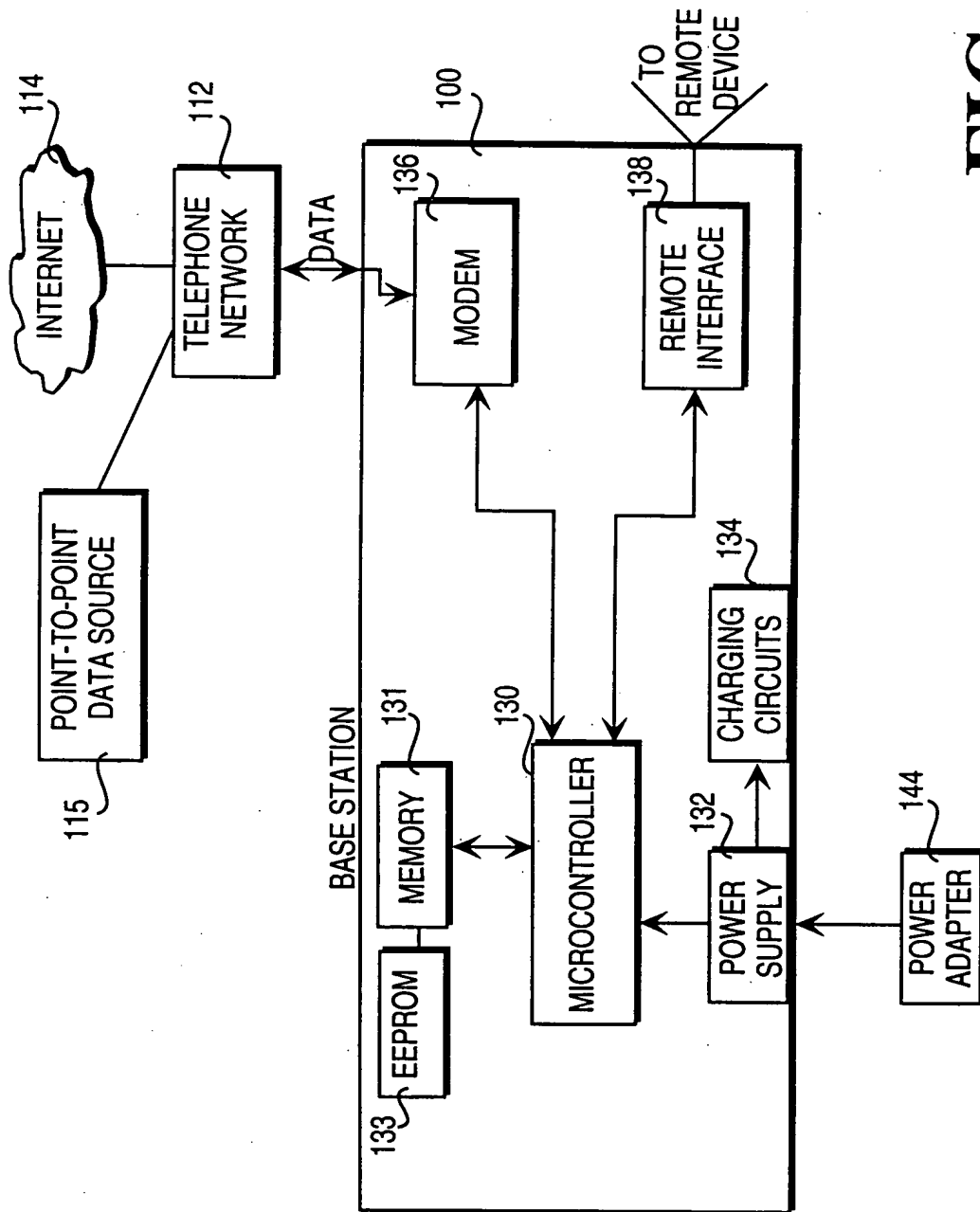


FIG. 54

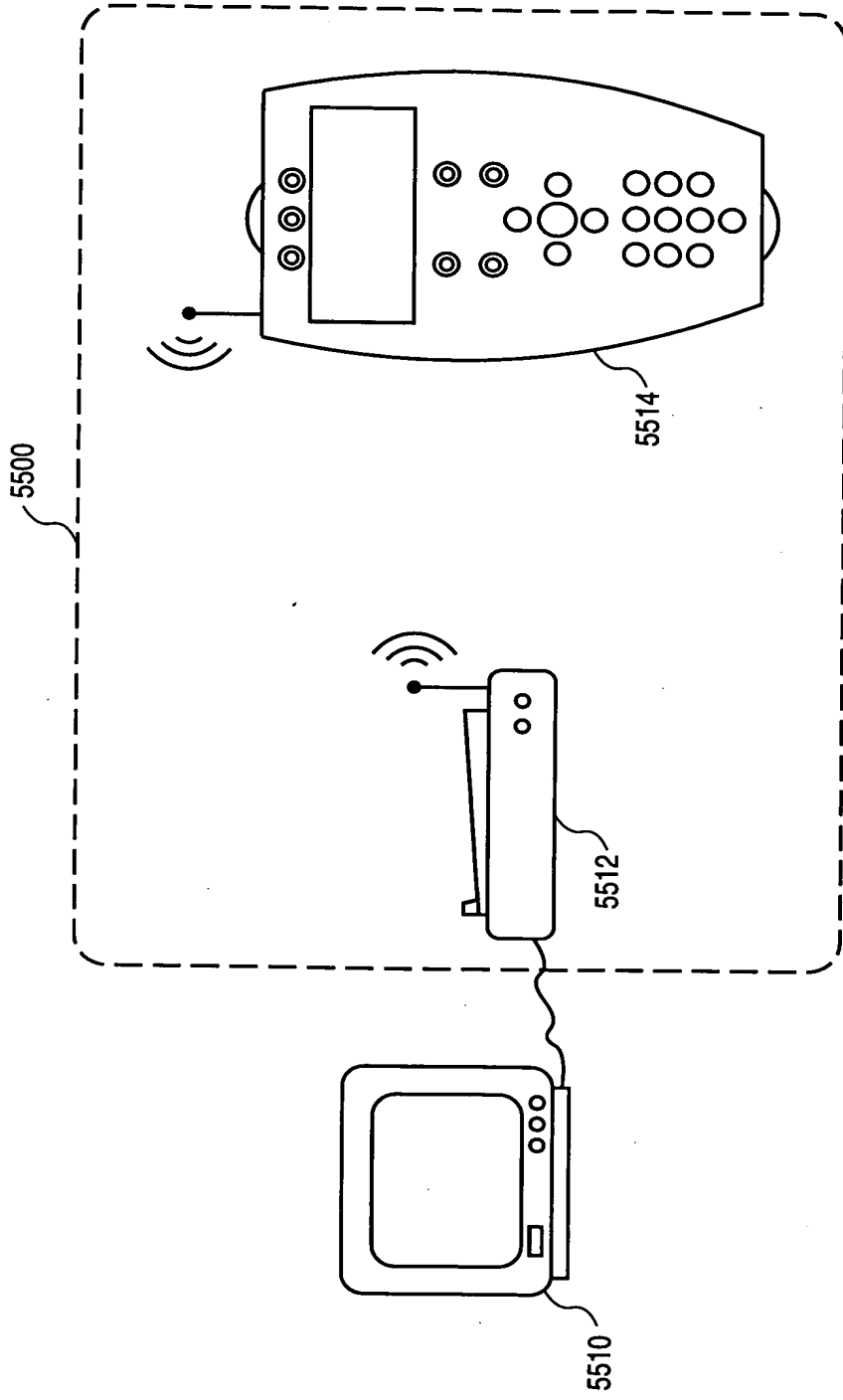


FIG. 55

5512

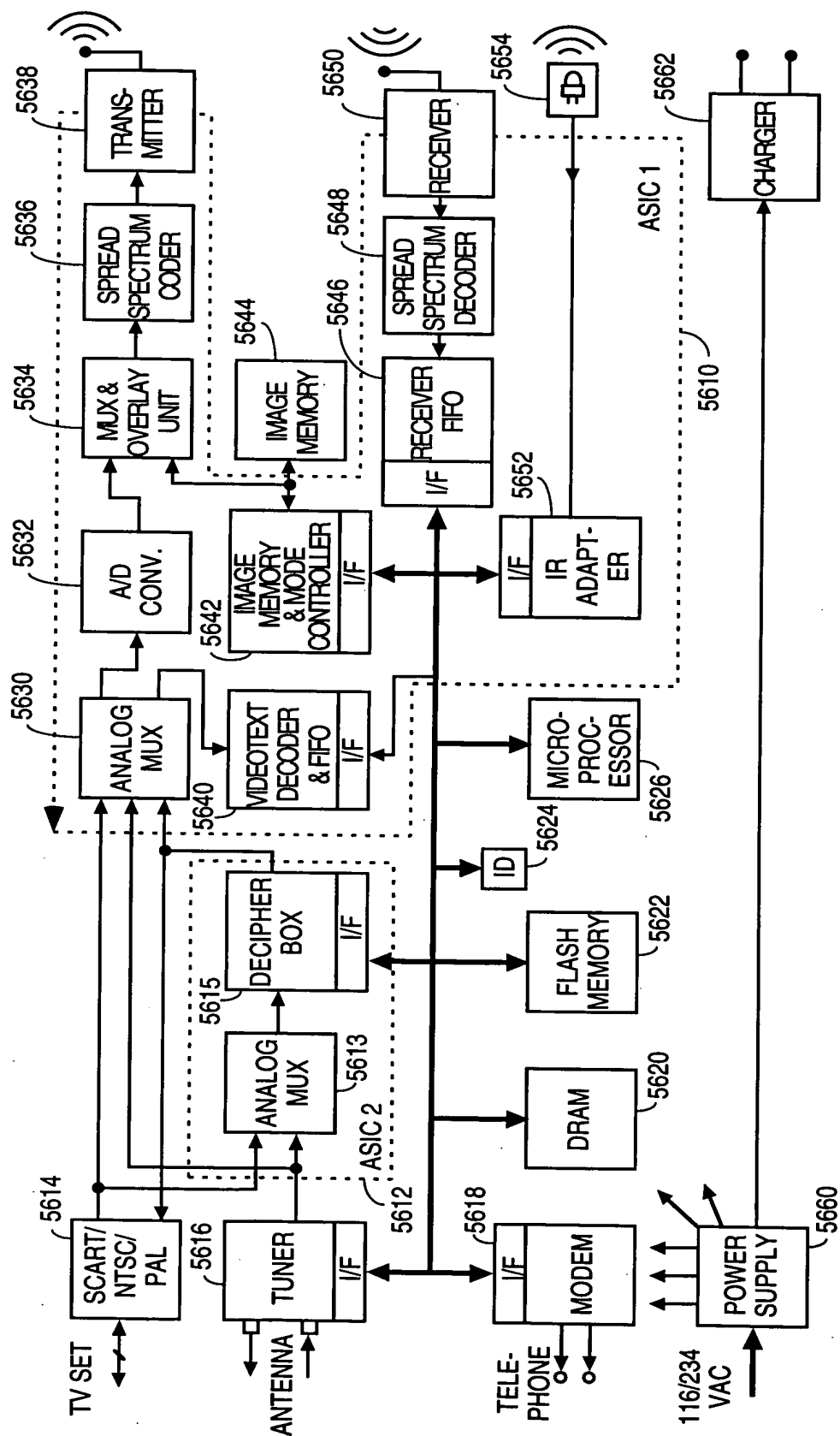


FIG. 56

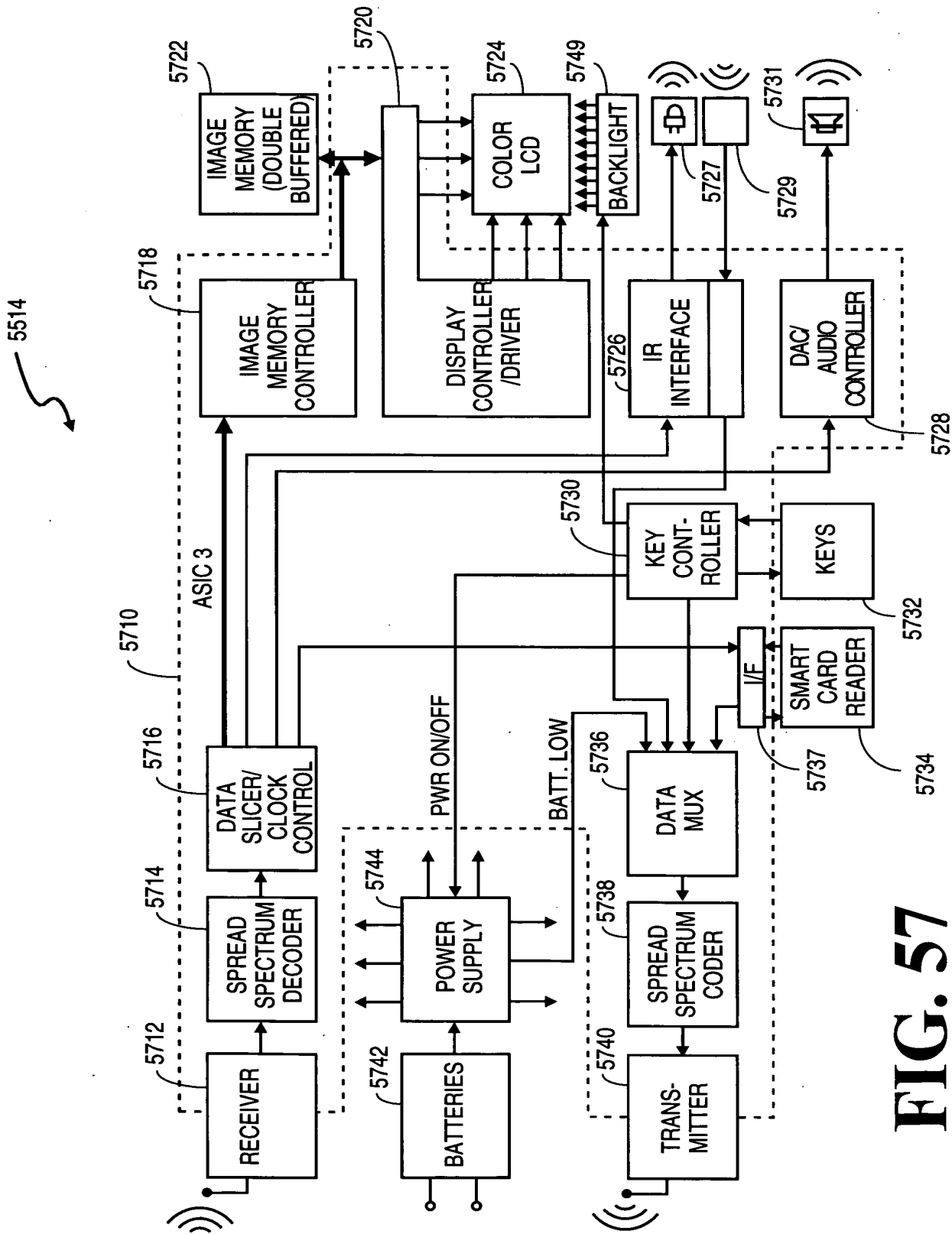


FIG. 57